STUDIES OF THE NORTH AMERICAN PROCTOTRUPIDÆ, WITH DESCRIPTIONS OF NEW SPECIES FROM FLORIDA.

(PAPER No. 3.)

BY WM. H. ASHMEAD, JACKSONVILLE, FLORIDA.

Sub-family MYMARINÆ.

LXVII. *Camptotera* Foerster. LXVIII. *Ooctonus* Haliday.

107 (1). Ooctonus longipes, n. sp.

Female. Length .o3 inch. Head and thorax black. Antennæ 11-jointed, scape and pedicel dilated below, flagellum and club pale brown, funicle joints slender, cylindrical, club greatly and enormously enlarged, not jointed. Legs long, slender, yellow. Abdomen ovate, black, shining; petiole slender, yellowish. Wings hyaline, very narrow, with extremely long ciliæ; submarginal vein short; marginal vein punctiform.

Hab.—Florida. Described from one specimen.

LXIX. Limacis Foerster.

108 (1). Limacis aspidioticola Ashm.

Aphelinus aspidioticola Ashm. Orange Insects, 1880, p. 9, pl. ii., f. 1, 4, 7, 9, 13.

Hab.—Florida.

LXX. Gonatocerus Nees.

109 (1). Gonatocerus dolichocerus, n. sp.

Female. Length, .o7 inch. Head, thorax and the sessile abdomen above, black, the latter beneath, brownish-yellow. Antennæ 11-jointed, as long as the whole body, black; the club is greatly lengthened, thick and not jointed. Legs including coxæ, pale yellowish-brown, the fore tibiæ obfuscated along upper edges, posterior tibiæ and tips of femora, dusky. Wings hyaline, fore wings broadened and rounded at tips, surrounded with short ciliæ; sub-marginal vein, the only one apparent, black; hind wings linear.

Hab.—Florida. Described from one specimen.

110 (2). Gonatocerus nigritarsis, n. sp.

Female. Length .05 inch. At once distinguished from the other species by its smaller size, shorter antennæ, brown, not black, and the less

thickened antennal club; the legs are yellowish, the fore tibiæ not obfuscated along upper edges, although the posterior pair are; all tarsi dusky; abdomen entirely black.

Hab.—Florida. Described from one specimen.

This species somewhat resembles a European species in my collection, . e., Gonatocerus ater Foerster, but the paler colored legs easily separate it.

LXXI. Litus Haliday.

111 (1). Litus armatus, n. sp.

Female. Length .o2 inch. Bright yellow. Eyes and flagellum brown. Antennæ 9-jointed, much longer than the whole body; scape and pedicel large, dilated below, first funicle joint short, not longer than wide, second as long as the thick club or terminal joint, other joints gradually shorter. Abdomen sessile with a dusky shade above at base; ovipositor exserted, stout, black, about two thirds as long as abdomen. Wings hyaline, narrow, with long ciliæ.

Hab.—Florida.

LXXII. Alaptus Walker.

112 (1). Alaptus pallipes, n. sp.

Female. Length .02 inch. Black. Head very large, much broader than the rather slender thorax. Antennæ 8-jointed, brown; scape short, dilated, pedicel small, first funicle joint shorter than second, second longer, third short but thicker than second, fourth much longer and thicker than third, fifth still longer but not so thick, club greatly swollen, as long as the scape. Abdomen sessile, ovate, not as long as thorax. Legs pale. Wings hyaline, with very long ciliæ, the fore wings spatulate, the hind wings linear.

Hab.-Florida.

LXXIII. Signiphora Ashmead.

113 (1). Signiphora flavopaliata Ashm. Orange Insects, 1880, p. 30, pl. ii.

Hab.—Florida.

LXXIV. Eustochus Haliday.

114 (1). Eustochus xanthothorax, n. sp.

Female. Length .03 inch. Head, prothorax and abdomen black; mesothorax and legs bright yellow; antennæ pale brown; tarsi four jointed; antennæ apparently (?) 9-jointed; tip of abdomen surrounding

anus, yellow. Wings extremely narrow, with long ciliæ; marginal vein elongated.

Hab.—Florida.

LXXVI. *Doriclytus* Foerster. LXXVI. *Mymar* Haliday. LXXVII. *Pteratomus* Packard.

115 (1). Pteratomus Putnamii Packard. Guide to the Study of Insects, p. 202, pl. iii., f. 8, 8 °.

Hab.-Massachusetts.

This genus is probably identical with Mymar Haliday.

LXXVIII. Cosmocoma Foerster.

116 (1). Cosmocoma elegans Howard. U. S. Agric. Rep., 1880, p 370. Hab.—District of Columbia.

There is a Cosmocoma elegans Foerster, in Europe, and this species may be changed to C. Howardii.

117 (2). Cosmocoma maculipes, n. sp.

Male. Length .03 inch. Black. Antennæ 13-jointed, longer than the whole body; scape and pedicel pale brown, flagellum black. Leg and petiole pale yellowish; femora and posterior tibiæ with a dusky blotch above. Wings hyaline.

Hab.—Florida.

This species is allied to *C. elegans* How., but the blotches on thighs and tibiæ will readily distinguish it.

LXXIX. Ceraphractus Walker. LXXX. Stictothrix Foerster. LXXXI. Anaphes Haliday.

118 (1). *Anaphes gracilis* Howard. U. S. Agric. Rep., 1880, p. 370 Hab.—California.

119 (2). Anaphes mellicornis, n. sp.

Female. Length .03 inch. Shining black. Antennæ 9-jointed, honey-yellow, the club dusky. Legs honey-yellow, femora and posterior tibiæ somewhat testaceous. Wings hyaline.

Hab. -Florida.

Sub-family DIAPRIINÆ.

LXXXII. Coptera Say.

(? Entomacis Foerst.)

120 (1). Coptera polita Say. LeConte's Ed. Say's Works, ii., p. 728. Prov., Le Nat. Can., xvi., p. 181.

Hab.—Indiana, Canada.

LXXXIII. Platymischus Westwood.

- 121 (1). Platymischus torquatus Prov. Le Nat. Can., vol. xvi., p. 182. Hab. Canada.
- 1'22 (2). *Platymischus abdominalis* Say (Psilus). LeConte's Ed. Say's Works, ii., p. 729. Hab.—Indiana.

LXXXIV. Galesus Curtis.

- 123 (1). Galesus ciliatus Say (Psilus). LeConte's Ed. Say's Works, i., p. 383. Hab.—Indiana.
 - 124 (2). Galesus obtusus Say (Psilus), l. c. i., p. 383.

Hab.-Indiana.

125 (3). Galesus colon Say (Psilus), l. c. ii., p. 727.

Hab.—Indiana.

126 (4). Galesus quebecensis Prov. Petite Faune Ent. du Canada, ii., p. 559. Hab.—Canada.

127 (5). Galesus floridensis, n. sp.

Male. Length of inch. Black, polished, with some sparse scattered pile, except on collar, where it is dense and white. Face prolonged; antennæ 14-jointed, piceous, much longer than body, joints with long white hairs; scape considerably swollen in the middle. Legs: coxæ, tips of femora, tibiæ and tarsi honey-yellow, femora black. Wings subhyaline. Hab.—Florida.

LXXXV. Aneurhynchus Westwood.

128 (1). Aneurhynchus apicalis Say, l. c. ii., p. 727.

Hab.-Indiana.

129 (2). Aneurhynchus spinosus Prov., l. c. ii., p. 56.

Hab.—Canada.

130 (3). Aneurhynchus inermis Prov. Add. Faune Hym., p. 176. Hab.—Canada.

131 (4). Aneurhynchus aneurus Prov., l. c., p. 176.

Hab.—Canada.

LXXXVI. Labolips Haliday.

LXXXVII. Cephalonomia Westwood.

132 (1). Cephalonomia hirticollis, n. sp.

Male. Length .08 inch. Black, highly polished. Antennæ 12-

jointed, dark red, scape paler at base, funicle joints very small, the four terminal joints greatly enlarged or swollen moniliform, the last joint is a little longer than broad. Prothorax densely covered with white pile. Legs dark red. Wings hyaline, veins yellowish.

Hab.—Florida.

133 (2). Cephalonomia floridana, n. sp.

Male. Length .05 inch. Entirely black, polished, excepting knees and tarsi, which are piceous. Antennæ 12-jointed, three terminal joints large moniliform, last joint being about as large as the two preceding ones together. Collar hairy; wings hyaline.

Hab.-Florida.

LXXXVIII. Paramesius Westwood.

134 (1). Paramesius terminatus Say (Psilus). LeConte's Ed. Say's Works, ii., p. 727. Hab.—Indiana.

LXXXIX. *Idiotypa* Foerster. XC. *Hemilexis* Foerster.

135 (1). Hemilexis mellipetiola, n. sp.

Male. Length .05 inch. Slender, black. Antennæ 13-jointed, moniliform, gradually incrassated, red-brown; scape, legs and petiole of abdomen, honey-yellow, femora slightly obfuscated. Thorax without grooves. Metathorax covered with white pile. Wings hyaline, ciliate; no marginal vein. Hab.—Florida.

XCI. Spilomicrus Westwood.

136 (1). Spilomicrus longicornis Prov. Petite Faune Ent. du C., ii., p. 56. Hab.—Canada.

137 (2). Spilomicrus foveatus Prov. Add. à la Faune Hym., p. 176. Hab.—Canada.

XCII. Diapria Latreille.

138 (1). Diapria brevicornis Say (Psilus), l. c. i, p. 221.

Hab.—St. Peter's River.

139 (2). Diapria erythrothorax. n. sp.

Male. Length .05 inch. Stature of *Diapria tritoma* Thoms. Head and abdomen black; thorax red; antennæ and legs honey-yellow; wings hyaline. Hab.—Florida.

XCIII. . Loxotropa Foerster.

140 (1). Loxotropa mellea, n. sp.

Male. Length .09 inch. Honey-yellow with long sparse, scattered

pubescence. Eyes and tip of abdomen brown. Antennæ 14-jointed, first funicle joint longer than pedicel or the second funicle joint, other joints moniliform, of nearly the same thickness. Mesothorax without grooves. Petiole of abdomen very thick dilated below. Wings hyaline, but with a yellowish cast, very pubescent.

Hab.—Florida.

XCIV. Basalys Westwood.

141 (1). Basalys ruficornis Prov. Petite Faune Ent. du Canada, ii., p. 560. Hab. Canada.

XCV. Glyptonota Foerster. XCVI. Monelata Foerster.

143 (1). Monelata mellicoilis, n. sp.

Female. Length .05 inch. Slender; head, thorax and abdomen polished black. Antennæ 13-jointed, honey-yellow; scape long, pedicel longer than first funicle joint, flagellar joints small, moniliform, terminal joint enormously enlarged or swollen, brown. Collar and legs honey-yellow. Mesopleuræ piceous. Mesoscutum without grooves. Wings hyaline, with long ciliæ.

XCVII. Polypeza Foerster.

Sub family BELYTINÆ.

XCVIII. Ismarus Haliday. XCIX. Psilomma Foerster.

144 (1). Psilomma americana, n. sp.

Male. Length .12 inch. Slender, black. Antennæ and legs honey-yellow. Antennæ 13-jointed, filiform, very long, reaching beyond tips of wings when folded, apical half dusky; the pedicel is annular, third joint excised outwardly half its length. Thorax sparsely pubescent, with two distinct grooves. Wings hyaline, veins brown; there is a basal cell and a small, closed triangular marginal cell; the radial vein projecting backwards to the middle of the wing.

Hab.-Florida.

C. Oxylabis Foerster.
CI. Belyta Jurine.
CII. Synacra Foerster.
CIII. Pantolyta Foerster.
CIV. Zygota Foerster.

CV. Aclista Foerster.

CVI. Acropiesta Foerster.

CVII. Anectata Foerster.

144 (1). Anectata hirtifrons, n. sp.

Female. Length .12 inch. Black, slightly pubescent. Face and cheeks covered with dense white pubescence. Antennæ 14-jointed, and when bent backwards reach to tip of abdomen; scape long, slightly bent or curved, pedicel annular, first five funicle joints longer than wide, following joints moniliform. Antennæ and legs rufous. Mesothorax with two grooves. Scutellum convex with a deep transverse groove at base. Abdominal petiole long, cylindrical, same thickness throughout. Wings hyaline, veins brown; the closed marginal cell is longer than the marginal vein.

Hab.—Canada. Described from one specimen kindly given me by Mr. W. H. Harrington, of Ottawa.

CVIII. Pantoclis Foerster.

CIX. Macrorhynosis Foerster.

CX. Xenotoma Foerster.

145 (1). Xenotoma mellipes Say (Cinctus). LeConte's Ed. Say's Works, p. 726.

Hab.—Indiana.

CXI. Leptorhaptus Foerster.

CXII. Cinctus Jurine.

146 (1). *Cinctus nasutus* Prov. Add. a la Faune Hym., p. 178. Hab.—Canada.

CXIII. Diphora Foerster.

CXIV. Zelotypa Foerster.

CXV. Miota Foerster.

A NEW VARIETY OF PAPILIO AND A NEW CATOCALA FROM THE PACIFIC COAST.

by James Behrens.

I have received from Mr. Behrens, of San Francisco, the following descriptions for publication, and with them the specimens to which they refer. The *Papilio* is a very extraordinary aberration, probably owing